

Mr. Sale said one of these waters contained so little lithia that to get a dose of 7 grains it would be necessary to drink 50,000 gallons of the water.

SIMPLE SCIENCE

BY WOW

PAPER

One should know something about writing paper because one's social position depends so much upon the grade of paper one uses. The ancients used to write on stones. The strongest men probably used heavy stones as a sign of their high rank. Instead of posting letters as we do now they used to throw them. Their love letters probably had more effect in those days than many of ours do.

Paper is quite an old commodity, although the English have used it only since the fourteenth century. Hornets have used it always. They bite off bits of wood and chew it until it turns into paper, and then make their nests of it. They get so cross when you go near their nest that they must be very fond of their paper, like men in the street car when ladies are standing. If people would chew wood instead of tobacco and gum, newspapers might be cheaper, and sidewalks cleaner.

Paper is usually made by chewing the wood with machinery, and soaking it in chemical saliva, which dissolves out the impurities and leaves a nice tough fibrous material called cellulose. The chemical saliva usually consists of either alkali, or acid bisulphite of lime. Cellulose occurs in all vegetable matter but not in animal matter. If you are in doubt what kingdom a thing or person belongs to you can tell by looking for cellulose. It's also a half brother to starch and a first cousin to sugar. It's like a good many relatives - lacks sweetness, is tough and lazy. It's used for making guncotton, paper, clothes, etc.

The cellulose is next sized by being soaked in water, alum, gypsum, resin soap, etc. It is next spread out in a thin layer on a wire screen belt and passed over rollers which squeeze it into long sheets of paper.

Rags make very good paper because the cellulose fibers in rags are long and tough. A friend of mine wears his suits ten years. His rags should make excellent paper.

Newspapers are hard on cellulose. Newsboys "sell you those" also. It's nice to know how paper is made so one can talk about it at afternoon teas.

STRAWBERRIES

The cultivated strawberries now grown in Europe and America owe their size to ancestors in Chili. Up to 1714, large fruited strawberries were not known in Europe; the native berries being small but of good flavor. In that year, a

Frechman brought plants from Chili. These were crossed with the native sorts and with the Virginian strawberry introduced into Europe early in the previous century. By this crossing, plants were developed which combined large size with delicate flavor.

TABLOID BOOK REVIEW

"THE STORY OF BAKELITE" by John Kimberley Mumford. New York, Robert L. Stittson Co., 461 Eighth Avenue.

This is advertising literature at its best, artistic, interesting, instructive, and authentic. A good book to get for the laboratory library for it tells all about a type of artificial resins that have come into common use and yet may not be mentioned in the textbook.

AMERICA'S CHEMICAL CENTER

What place in America is famous for its petroleum refining? Not Texas or California, famous for oil, but New York City and its environs. A survey by the Committee on Regional Plan of New York and Its Environs shows that the output of refineries in the vicinity of New York represents one-fifth of the petroleum wealth of the entire country. It was also found that a region containing one-tenth of the population of the country is producing one-fifth of the chemical output of the United States. The chemical industry is centered in New York. Yet Manhattan and Brooklyn, New York proper, is rapidly becoming an odorless city, the chemical industry is deserting that part of New York for the open country and cheaper land.

NATURE'S CROSSES

Many may be shocked to learn that President Roosevelt used to wear a cross on his watch chain. It was in one of those lucky stones which are often plowed up in the fields or found on the surface of the ground after a rain storm in some parts of Virginia and Georgia. These stones are in reality double crystals of the mineral staurolite, a somewhat uncommon silicate, that are so placed with respect to each other that their prominent edges form a true cross. These crystalline crosses are just one of the mysteries of Nature's laboratory.

The appetites of hogs and cattle do not grow less as they grow older but ability to put on flesh does decrease.

There are practically no negro children in Mississippi who are blind as the results of preventable infection at birth, the surprising results of a recent health survey show.
